## **AMENDMENTS TO THE CLAIMS**

Amendments to the claims are reflected below in the **Listing of Claims**, which replaces all prior versions, and listings, of claims in this application.

## **Listing of Claims**

(Currently Amended) A method comprising:
 receiving, from a client computer, a point-to-point request message;
 converting the point-to-point request message to a subject-based message, the
 <u>subject-based message addressed with a subject-based addressing protocol</u>;
 multicasting the subject-based message;

receiving a response to the subject-based message, the response to the subject-based message addressed with a subject-based addressing protocol;

converting the response to the subject-based message to a point-to-point response message; and

transmitting the point-to-point response message back to the client computer.

- 2. (Currently Amended) The method of claim 1, wherein the converting includes assigning a <u>subject name and a reply</u> subject to the subject-based message.
- 3. (Original) The method of claim 1, wherein the point-to-point request message is based on HyperText Transfer Protocol.
- 4. (Canceled)

- 5. (Currently Amended) The method of claim [[4]] 36, wherein the group of subscribers that have subscribed to receive the subject-based message can dynamically change.
- 6. (Original) The method of claim 1, wherein the subject-based message is independent of an identity of a recipient.
- 7. (Original) The method of claim 1, wherein the subject-based message is independent of a protocol used by a recipient of the subject-based message.
- 8. (Currently Amended) A method for processing a point-to-point request based on HyperText Transfer Protocol (HTTP), the method comprising: receiving, from a client computer, the point-to-point request;

converting the point-to-point request to a subject-based message, the subject-based message addressed with a subject-based addressing protocol;

multicasting the subject-based message to a number of application servers across a network;

receiving a response to the subject-based message from one of the number of application servers, the response to the subject-based message addressed with a subject-based addressing protocol;

extracting content from the response to the subject-based message;
generating a point-to-point response using the content from the response to the subject-based message; and

sending the point-to-point response back to the client computer.

- 9. (Currently Amended) The method of claim 8, wherein the converting includes assigning a <u>subject name and a reply</u> subject to the subject-based message.
- 10. (Canceled)
- 11. (Currently Amended) The method of claim [[ 10]] <u>37</u>, wherein the group of subscribers <u>that have subscribed</u> to receive the subject-based message can dynamically change.
- 12. (Currently Amended) The method of claim[[ 11]] 8, wherein the subject-based message is independent of an identity of a recipient.
- 13. (Currently Amended) The method of claim[[ 11]] 8, wherein the subject-based message is independent of a protocol used by a recipient of the subject-based message.
- 14. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a processor, cause said processor to perform operations comprising:

receiving, from a client computer, a point-to-point request message; converting the point-to-point request message to a subject-based message, the subject-based message addressed with a subject-based addressing protocol; multicasting the subject-based message;

receiving a response to the subject-based message, the response to the subject-based message addressed with a subject-based addressing protocol;

converting the response to the subject-based message to a point-to-point response message; and

transmitting the point-to-point response message back to the client computer.

15. (Currently Amended) The machine-readable medium of claim 14, wherein the converting includes assigning a <u>subject name and a reply</u> subject to the subject-based message.

16. (Original) The machine-readable medium of claim 14, wherein the point-to-point request message is based on HyperText Transfer Protocol.

## 17. (Canceled)

18. (Currently Amended) The machine-readable medium of claim[[ 17]] 38, wherein the group of subscribers to receive the subject-based message can dynamically change.

19. (Original) The machine-readable medium of claim 14, wherein the subjectbased message is independent of an identity of a recipient.

20. (Original) The machine-readable medium of claim 14, wherein the subject-based message is independent of a protocol used by a recipient of the subject-based message.

21. (Currently Amended) A machine-readable medium that provides instructions for processing a point-to-point request based on HyperText Transfer

Protocol (HTTP), which when executed by a processor, cause said processor to perform operations comprising:

receiving, from a client computer, the point-to-point request;

converting the point-to-point request to a subject-based message, the subject-based message addressed with a subject-based addressing protocol;

multicasting the subject-based message to a number of application servers across a network;

receiving a response to the subject-based message from one of the number of application servers, the response to the subject-based message addressed with a subject-based addressing protocol;

extracting content from the response;

generating a point-to-point response using the content from the response; and sending the point-to-point response back to the client computer.

22. (Currently Amended) The machine-readable medium of claim 21, wherein the converting includes assigning a <u>subject name and a reply</u> subject to the subject-based message.

23. (Canceled)

24. (Currently Amended) The machine-readable medium of claim[[ 23]] 39, wherein the group of subscribers to receive the subject-based message can dynamically change.

25. (Original) The machine-readable medium of claim 21, wherein the subjectbased message is independent of an identity of a recipient.

26. (Original) The machine-readable medium of claim 21, wherein the subjectbased message is independent of a protocol used by a recipient of the subjectbased message.

27. (Currently Amended) An application server coupled to a network, the application server comprising:

a database having data;

a processor coupled to the database, the processor to process subject-based messages received from a server, the subject-based messages <u>addressed with a subject-based addressing protocol and including to include</u>-requests for data content wherein the subject-based messages are generated from point-to-point messages received from a client computer, the processing including:

listening for a subject-based request message being received from the network;

extracting portions of the data in the database based on the request in the subject-based message;

generating a subject-based response message that includes the portions of the data extracted from the database; and

transmitting the subject-based response message back to the server.

- 28. (Original) The application server of claim 27, wherein the point-to-point request message is based on HyperText Transfer Protocol.
- 29. (Currently Amended) The application server of claim 27, wherein the subject-based response message includes a <u>subject name and a</u> reply subject assigned by the server.

- 30. (Original) The application server of claim 27, wherein the subject-based message is independent of an identity of a recipient.
- 31. (Original) The application server of claim 27, wherein the subject-based message is independent of a protocol used by a recipient of the subject-based message.

## 32. (Currently Amended) A system comprising:

a server coupled to a network, the server to receive a point-to-point request message based on HyperText Transfer Protocol (HTTP) from a web browser and to process the point-to-point request message, the processing of the point-to-point request message including:

converting the point-to-point request message to a subject-based message, the subject-based message addressed with a subject-based addressing protocol;

multicasting the subject-based message;

receiving a response to the subject-based message, the response to the subject-based message addressed with a subject-based addressing protocols;

converting the <u>response to the</u> subject-based message to a point-topoint response message; and

transmitting the point-to-point response message back to the web browser; and

a number of application servers coupled to the network, each of the number of application servers comprising:

a database having data;

a processor coupled to the database, the processor to process the subjectbased message received from the server, the processing of the subject-based message including:

listening for a subject-based request message being received from the network;

extracting portions of the data in the database based on the request in the subject-based message;

generating a subject-based response message that includes the portions of the data extracted from the database; and

transmitting the subject-based response message back to the server.

33. (Original) The system of claim 32, further comprising a distributed queue, the distributed queue to receive the subject-based message from the server, wherein one of the number of application servers schedules which of the application servers are to process the subject-based message received in the distributed queue.

34. (Original) The system of claim 32, wherein the number of application servers can dynamically change.

35. (Original) The system of claim 32, wherein the subject-based message is independent of a protocol used by the number of application servers.

36. (New) The method of claim 2, wherein the subject-based message is delivered to a group of subscribers that have subscribed to receive subject-based messages which have been assigned the subject name.

37. (New) The method of claim 8, wherein the subject-based message is delivered to a group of subscribers that have subscribed to receive subject-based messages which have been assigned the subject name.

38. (New) The machine-readable medium of claim 14, wherein the subject-based message is delivered to a group of subscribers that have subscribed to receive subject-based messages which have been assigned with the subject name.

39. (New) The machine-readable medium of claim 21, wherein the subject-based message is delivered to a group of subscribers that have subscribed to receive subject-based messages which have been assigned with the subject name.